

DIKE, BRONSTEIN, ROBERTS & CUSHMAN
INTELLECTUAL PROPERTY PRACTICE GROUP OF
EDWARDS & ANGELL, LLP
P. O. Box 9169
Boston, Massachusetts 02209



Docket No
(70904) 60416

Page 1 of 4

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed at 201) below or an original, first and joint inventor (if plural names are listed at 201-206 below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **MANUFACTURING METHOD AND MANUFACTURING APPARATUS OF FIELD EMISSION DISPLAY** which is described and claimed in:

☒ the specification attached hereto.

☐ the specification in U.S. Application Serial Number _____, filed on _____.

☐ the specification in PCT international application Number _____, filed on _____; and was amended on _____.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign/PCT Applications and Any Priority Claims Under 35 U.S.C. §119:			
Application No.	Filing Date	Country	Priority Claimed Under 35 U.S.C. §119?
2002-363043	December 13, 2002	Japan	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2003-166800	June 11, 2003	Japan	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose material information as defined in 37 CFR §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Prior U.S. Applications or PCT International Applications Designating the U.S-Benefit Under 35 U.S.C. §120					
U.S. Applications			Status (Check One)		
Application Serial No.	U.S. Filing Date		Patented	Pending	Abandoned
PCT Applications Designating the U.S.					
Application No.	Filing Date	U.S. Serial No. Assigned			

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)
(35 U.S.C. §119(e))**

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Applicant	Provisional Application Number	Filing Date

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) with full powers of association, substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David G. Conlin (Reg. No. 27,026)	Robert L. Buchanan (Reg. No. 40,927)	Steven M. Jensen (Reg. No. 42,693)
Peter F. Corless (Reg. No. 33,860)	Peter J. Manus (Reg. No. 26,766)	Christine C. O'Day (Reg. No. 38,256)
George W. Neuner (Reg. No. 26,964)	Cara Z. Lowen (Reg. No. 38,227)	Lisa Hazzard Swiszc (Reg. No. 44,368)
Linda M. Buckley (Reg. No. 31,003)	William J. Daley, Jr. (Reg. No. 35,487)	David A. Tucker (Reg. No. 27,840)
George W. Hartnell, III (Reg. No. 42,639)	Richard Roos (Reg. No. 45,053)	T. Carter Pledger (Reg. No. 29,424)
	John B. Alexander (Reg. No. 48,399-P)	Peter J. Manso (Reg. No. 32,264)

SEND CORRESPONDENCE TO: David G. Conlin, Esq. Dike, Bronstein, Roberts & Cushman Intellectual Property Practice Group Edwards & Angell, LLP P. O. Box 9169 Boston, Massachusetts 02209	DIRECT TELEPHONE CALLS TO: (617) 439-4444
---	---

201	FULL NAME OF INVENTOR	LAST NAME NAGASAKA	FIRST NAME Yukiko	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Tenri-shi	STATE OR FOREIGN COUNTRY Nara Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 2613-1-226, Ichinomoto-cho	CITY Tenri-shi	STATE OR COUNTRY AND ZIP CODE Nara 632-0004 Japan
202	FULL NAME OF INVENTOR	LAST NAME KITAMURA	FIRST NAME Kazuya	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Tenri-shi	STATE OR FOREIGN COUNTRY Nara Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 78-3, Aramaki-cho	CITY Tenri-shi	STATE OR COUNTRY AND ZIP CODE Nara 632-0082 Japan
203	FULL NAME OF INVENTOR	LAST NAME TAMURA	FIRST NAME Toshihiro	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY Shiki-gun	STATE OR FOREIGN COUNTRY Nara Japan	COUNTRY OF CITIZENSHIP Japan
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 352-5, Miyako Tawaramoto-cho	CITY Shiki-gun	STATE OR COUNTRY AND ZIP CODE Nara 636-0302 Japan
204	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE
205	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE
206	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of Inventor 201 <i>Yukiko Nagasaka</i>	Signature of Inventor 202 <i>Kazuya Kitamura</i>
Date: <i>November 13, 2003</i>	Date: <i>Nov. 13, 2003</i>
Signature of Inventor 203 <i>Joshihiro Tamura</i>	Signature of Inventor 204
Date: <i>Nov. 18, 2003</i>	Date:
Signature of Inventor 205	Signature of Inventor 206
Date:	Date:

PATENTS ONLY

Tab settings → → → ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼

To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Yukiko Nagasaka
Kazuya Kitamura
Toshihiro Tamura

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Inventors Nagasaka and Kitamura - 11/13/03

Execution Date: Inventor Tamura - 11/18/03

2. Name and address of receiving party(ies):

Name: Sharp Kabushiki Kaisha

Address: 22-22, Nagaike-cho, Abeno-ku

City: Osaka 545-8522

State/Prov.:

Country: Japan

ZIP:

Additional name(s) & address(es)

☐ Yes ☒ No

4. Application number(s) or patent numbers(s):

Inventors Nagasaka and Kitamura - 11/13/03

Inventor Tamura-11/18/03

If this document is being filed together with a new application, the execution date of the application is:

Patent Application No.

Filing date

B. Patent No.(s)

Additional numbers

☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Peter J. Manus

Registration No. 26,766

Address: EDWARDS & ANGELL, LLP

P.O. Box 9169

City: Boston

State/Prov.: MA

Country: US

ZIP: 02209

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41):.....\$ 40.00

☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☐ Authorized to be charged to deposit account

8. Deposit account number:

04-1105

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Peter J. Manus

Name of Person Signing



Signature

Dec 5, 2003

3

Date

Total number of pages including cover sheet, attachments, and

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services

Director of the United States Patent and Trademark Office

P.O. Box 1450, Alexandria, VA 22313-1450

The undersigned hereby grant(s) the law firm of Edwards & Angell, LLP, of P.O. Box 9169, Boston, Massachusetts 02209, U.S.A. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has the full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement in conflict herewith.

In witness whereof, signed by the undersigned on the date(s) opposite the undersigned names.

Date: November 13, 2003

Signature of Inventor: Yukiko Nagasaka

Name: Yukiko NAGASAKA

Date: Nov. 13, 2003

Signature of Inventor: Kazuya Kitamura

Name: Kazuya KITAMURA

Date: Nov. 18, 2003

Signature of Inventor: Toshihiro Tamura

Name: Toshihiro TAMURA

Date: _____

Signature of Inventor: _____

Name: _____

Date: _____

Signature of Inventor: _____

Name: _____

Date: _____

Signature of Inventor: _____

Name: _____

ASSIGNMENT

WHEREAS, the following inventor(s):Yukiko NAGASAKA, Kazuya KITAMURA and Toshihiro TAMURA, hereinafter designated as the undersigned) has (have) invented certain new and useful improvements

in **MANUFACTURING METHOD AND MANUFACTURING APPARATUS OF FIELD EMISSION DISPLAY**

, for which application for Letters Patent of the United States has been filed on_____, Serial No._____; and

WHEREAS, SHARP KABUSHIKI KAISHA, a Japanese, corporation, having its principal place of business at Osaka, Japan, its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and to any Letters Patent(s) that may be granted therefor in the United States of America;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration to the undersigned, the receipt of which is hereby acknowledged, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to furnish all pertinent facts and documents relating to said application, said invention and said patent(s) as may be known and accessible to the undersigned, and will testify as to the same in any interference or litigation related thereto, and will promptly execute and deliver to Assignee any and all papers, instruments or affidavits necessary or desirable to apply for, obtain, maintain or enforce said application or said patent(s) in connection with any interference which may be declared, and any litigation concerning this application or any continuation, division or reissue thereof or Patent(s) or reissue patent(s) issued thereon, and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference or litigation.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

DGC/PJM
60416 (70904)



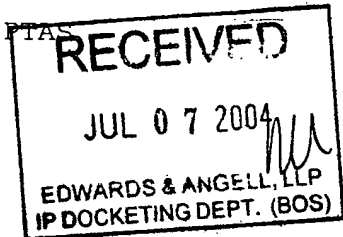
NOTED ON SYSTEM

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JUNE 29, 2004

EDWARDS & ANGELL
PETER J. MANUS
P.O. BOX 9169
BOSTON, MA 02209



102626204A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/05/2003

REEL/FRAME: 014792/0710
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: (70904) 60416

ASSIGNOR:
NAGASAKA, YUKIKO

DOC DATE: 11/13/2003

ASSIGNOR:
KITAMURA, KAZUYA

DOC DATE: 11/13/2003

ASSIGNOR:
TAMURA, TOSHIHIRO

DOC DATE: 11/18/2003

ASSIGNEE:
SHARP KABUSHIKI KAISHA
22-22, NAGAIKE-CHO, ABENO-KU
OSAKA 545-8522, JAPAN

014792/0710 PAGE 2

SERIAL NUMBER: 10730676
PATENT NUMBER:
TITLE:

FILING DATE:
ISSUE DATE:

DIANE RUSSELE, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

12-18-2003

cket No.: (70904) 60416

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office



Tab settings

To the Director of the United States Patent and Trademark Office

102626204

attached original documents or copy thereof.

1. Name of conveying party(ies):

Yukiko Nagasaka
Kazuya Kitamura
Toshihiro Tamura

12.5.03

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: Sharp Kabushiki Kaisha

Address: 22-22, Nagaike-cho, Abeno-ku

City: Osaka 545-8522

State/Prov.: _____

Country: Japan

ZIP: _____

Additional name(s) & address(es)

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other _____

Inventors Nagasaka and Kitamura - 11/13/03

Execution Date: Inventor Tamura - 11/18/03

4. Application number(s) or patent numbers(s):

Inventors Nagasaka and Kitamura - 11/13/03

If this document is being filed together with a new application, the execution date of the application is: _____

Inventor Tamura-11/18/03

Patent Application No. _____

Filing date _____

B. Patent No.(s) _____

12/11/2003 STEUHEL1 00000023 10730676

01 FC:8021

40.00 DP

Additional numbers

☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Peter J. Manus

Registration No. 26,766

Address: EDWARDS & ANGELL, LLP

P.O. Box 9169

City: Boston

State/Prov.: MA

Country: US

ZIP: 02209

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41):.....\$ 40.00

☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☐ Authorized to be charged to deposit account

8. Deposit account number:

04-1105

(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Peter J. Manus

Name of Person Signing

Signature

Dec 5, 2003

Date

3

Total number of pages including cover sheet, attachments, and